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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/608,443	06/26/2003	Raymond Dueck	VIDI-003	7140

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EXAMINER

RINEHART, KENNETH

ART UNIT PAPER NUMBER

3749

DATE MAILED: 09/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/608,443

Applicant(s)

DUECK ET AL.

Examiner

Kenneth B. Rinehart

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 27-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 27-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 27-30 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 27 refers to “wherein silica collects on an inner wall of said secondary combustion chamber and drains into said silica collector” which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 27-32 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claims 27 and 30 refer to “at least 2000 F” which is an open ended range and was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claims 27-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 27, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 27, 28, 30-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Sage (6021724). Sage shows a primary combustion chamber creating a primary combustion of biomass material to create a producer gas, wherein said biomass material contains silica ( burner 58, fig. 6), an agitator within said primary combustion chamber to mix said biomass material during said primary combustion (air fig. 6), a secondary combustion chamber containing a secondary combustion of said producer gas, wherein said second combustion chamber is fluidly connected to said primary combustion chamber (26, fig. 1); an oxygen mixer fluidly connected between said primary combustion chamber and said secondary combustion chamber to introduce additional oxygen into said producer gas emitted from said biomass material to increase a temperature of said second combustion to at least 2,000 degrees (42, fig. 1), a silica collector positioned at a bottom of said secondary combustion chamber for collecting liquid silica,

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wherein silica collects on an inner wall of said secondary combustion chamber and drains into said silica collector (28, 52, fig. 1), said silica collector is comprised of a container (to left of 52, fig. 1), a volume of liquid within said silica collector (slag, fig. 1), feeding a volume of biomass containing silica into a primary combustion chamber (84, fig. 1); combusting said biomass within said primary combustion chamber resulting in producer agitating said volume of biomass within said primary combustion chamber during said combusting said biomass (air agitates, fig. 1); adding oxygen to said producer gas (42, fig. 1); combusting said producer gas within a secondary combustion chamber fluidly connected to said primary combustion chamber at a temperature of at least 2,000 degrees Fahrenheit (26, fig. 1); and collecting a volume of silica at a bottom of said secondary combustion chamber, said step of collecting a volume of silica is comprised of collecting said volume of silica within a silica collector positioned approximately at a bottom of said secondary combustion chamber (28, 54, fig. 1).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sage (6021724) in view of Noack. Sage discloses a primary combustion chamber creating a primary combustion of biomass material to create a producer gas, wherein said biomass material contains silica (burner 58, fig. 6), an agitator within said primary combustion chamber to mix said biomass material during said primary combustion (air fig. 6), a secondary combustion chamber containing

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a secondary combustion of said producer gas, wherein said second combustion chamber is fluidly connected to said primary combustion chamber (26, fig. 1); an oxygen mixer fluidly connected between said primary combustion chamber and said secondary combustion chamber to introduce additional oxygen into said producer gas emitted from said biomass material to increase a temperature of said second combustion to at least 2,000 degrees (42, fig. 1), a silica collector positioned at a bottom of said secondary combustion chamber for collecting liquid silica, wherein silica collects on an inner wall of said secondary combustion chamber and drains into said silica collector (28, 52, fig. 1), said silica collector is comprised of a container (to left of 52, fig. 1), a volume of liquid within said silica collector (slag, fig. 1), feeding a volume of biomass containing silica into a primary combustion chamber (84, fig. 1); combusting said biomass within said primary combustion chamber resulting in producer agitating said volume of biomass within said primary combustion chamber during said combusting said biomass (air agitates, fig. 1); adding oxygen to said producer gas (42, fig. 1); combusting said producer gas within a secondary combustion chamber fluidly connected to said primary combustion chamber at a temperature of at least 2,000 degrees Fahrenheit (26, fig. 1); and collecting a volume of silica at a bottom of said secondary combustion chamber, said step of collecting a volume of silica is comprised of collecting said volume of silica within a silica collector positioned approximately at a bottom of said secondary combustion chamber (28, 54, fig. 1). Sage discloses discloses applicant's invention substantially as claimed with the exception of said silica collector is comprised of a cart. Noack teaches said silica collector is comprised of a cart (7, fig. 1) for the purpose of removing the slag to provide for more efficient operation of the apparatus. It would have been obvious to one of ordinary skill in the art to modify Rackley by including said silica

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collector is comprised of a cart as taught by Noack for the purpose of removing the slag to provide for more efficient operation of the apparatus so that the slag does not accumulate.


***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth B. Rinehart whose telephone number is 571-272-4881. The examiner can normally be reached on 7:20 -4:20.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ehud Gartenberg can be reached on 571-272-4828. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

kbr

  
KENNETH RINEHART  
PRIMARY EXAMINER